

TABLE 3.—Maximum free air wind velocities, (m. p. s.), for different sections of the United States based on pilot balloon observations during November 1944

| Section                    | Surface to 2,500 meters (m. s. l.) |           |                       |      |                     | Above 2,500 to 5,000 meters (m. s. l.) |           |                       |      |                    | Above 5,000 meters (m. s. l.) |           |                       |      |                    |
|----------------------------|------------------------------------|-----------|-----------------------|------|---------------------|--|-----------|-----------------------|------|--------------------|-------------------------------|-----------|-----------------------|------|--------------------|
|                            | Maximum velocity                   | Direction | Altitude (m) m. s. l. | Date | Station             | Maximum velocity                       | Direction | Altitude (m) m. s. l. | Date | Station            | Maximum velocity              | Direction | Altitude (m) m. s. l. | Date | Station            |
| Northeast <sup>1</sup>     | 40.4                               | SW.       | 437                   | 30   | Nantucket, Mass.    | 48.4                                   | NNW.      | 5,000                 | 13   | Burlington, Vt.    | 58.4                          | NE.       | 9,017                 | 25   | Philadelphia, Pa.  |
| East-Central <sup>2</sup>  | 34.0                               | NW.       | 2,160                 | 30   | Greensboro, N. C.   | 60.5                                   | W.        | 5,000                 | 30   | Knoxville, Tenn.   | 84.7                          | WNW.      | 10,022                | 18   | Huntington, W. Va. |
| Southeast <sup>3</sup>     | 33.6                               | W.        | 2,472                 | 30   | Charleston, S. C.   | 47.6                                   | NW.       | 3,871                 | 23   | Jacksonville, Fla. | 74.2                          | W.        | 11,611                | 24   | Jacksonville, Fla. |
| North-Central <sup>4</sup> | 35.5                               | SSW.      | 1,783                 | 23   | Rapid City, S. Dak. | 43.9                                   | NNW.      | 5,000                 | 23   | Fargo, N. Dak.     | 69.6                          | SW.       | 8,952                 | 24   | Williston, N. Dak. |
| Central <sup>5</sup>       | 39.6                               | SSW.      | 2,330                 | 24   | Dodge City, Kans.   | 54.2                                   | NW.       | 4,856                 | 23   | St. Louis, Mo.     | 52.4                          | NW.       | 5,126                 | 23   | St. Louis, Mo.     |
| South-Central <sup>6</sup> | 35.6                               | NNW.      | 1,011                 | 9    | Houston, Tex.       | 44.6                                   | WSW.      | 4,957                 | 13   | Amarillo, Tex.     | 75.0                          | WSW.      | 10,107                | 13   | Amarillo, Tex.     |
| Northwest <sup>7</sup>     | 35.9                               | NW.       | 2,235                 | 21   | Glasgow, Mont.      | 41.5                                   | NW.       | 4,548                 | 21   | Great Falls, Mont. | 73.3                          | NNW.      | 6,582                 | 24   | Burns, Oreg.       |
| West-Central <sup>8</sup>  | 33.3                               | N.        | 2,500                 | 25   | Pueblo, Colo.       | 53.0                                   | NNW.      | 5,000                 | 24   | Reno, Nev.         | 68.0                          | WNW.      | 14,095                | 28   | Ely, Nev.          |
| Southwest <sup>9</sup>     | 32.6                               | WSW.      | 1,999                 | 24   | El Paso, Tex.       | 41.0                                   | WSW.      | 4,258                 | 13   | Roswell, N. Mex.   | 79.0                          | WSW.      | 10,188                | 13   | Phoenix, Ariz.     |

<sup>1</sup> Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, and northern Ohio.

<sup>2</sup> Delaware, Maryland, Virginia, West Virginia, southern Ohio, Kentucky, eastern Tennessee, and North Carolina.

<sup>3</sup> South Carolina, Georgia, Florida, and Alabama.

<sup>4</sup> Michigan, Wisconsin, Minnesota, North Dakota, and South Dakota.

<sup>5</sup> Indiana, Illinois, Iowa, Nebraska, Kansas, and Missouri.

<sup>6</sup> Mississippi, Arkansas, Louisiana, Oklahoma, Texas (except El Paso), and western Tennessee.

<sup>7</sup> Montana, Idaho, Washington, and Oregon.

<sup>8</sup> Wyoming, Colorado, Utah, northern Nevada, and northern California.

<sup>9</sup> Southern California, southern Nevada, Arizona, New Mexico, and extreme west Texas.

## RIVER STAGES AND FLOODS

By C. R. JORDAN

**P**RECIPIATION during November averaged well above normal over a considerable part of the country, particularly along the north Atlantic coast, central Gulf coast, in the northern Great Plains, and the Southwest. Some localities in the Dakotas and the far Southwest received over four times the normal precipitation for the month. Rainfall continued below normal in the Ohio Valley, the Southeast, western Texas, parts of Colorado and New Mexico, and the far Northwest.

River stages were generally low during November and little flooding was reported.

**Atlantic Slope Drainage.**—Light to heavy rain that occurred over North Carolina from November 27–30, caused rises in all rivers in that area. The Neuse River was above flood stage and still rising at Smithfield and Neuse, N. C., as the month closed.

**Red Basin.**—The Sulphur River at Hagansport, Tex., was slightly above flood stage on the 9th and again on the

25th–26th. Only minor flooding occurred and no damage was reported.

## FLOOD-STAGE REPORT FOR NOVEMBER 1944

[All dates in November unless otherwise specified]

| River and station                | Flood stage       | Above flood stages—<br>dates |           | Crest <sup>1</sup>  |         |
|----------------------------------|-------------------|------------------------------|-----------|---------------------|---------|
|                                  |                   | From—                        | To—       | Stage               | Date    |
| ATLANTIC SLOPE DRAINAGE          |                   |                              |           |                     |         |
| Roanoke: Williamston, N. C.----- | <i>Feet</i><br>10 | Oct. 26                      | 1         | <i>Feet</i><br>10.9 | Oct. 28 |
| Neuse:-----                      |                   |                              |           |                     |         |
| Neuse, N. C.-----                | 14                | 28                           | (2)       |                     |         |
| Smithfield, N. C.-----           | 13                | 29                           | (2)       | 14.2                | 30      |
| MISSISSIPPI SYSTEM               |                   |                              |           |                     |         |
| <i>Red Basin</i>                 |                   |                              |           |                     |         |
| Sulphur: Hagansport, Tex.-----   | 38                | { 9<br>25                    | { 9<br>26 | 38.2<br>28.6        | 9<br>26 |

<sup>1</sup> Provisional.

<sup>2</sup> Continued at end of month.